

TOP SECRET



I
MAGERY
A
NALYSIS



S
TAFF

PIR

PHOTOGRAPHIC INTELLIGENCE REPORT

VITAL RECORDS COPY
NAVAL BASE AND SHIPYARD 402

SEVERODVINSK, USSR

25X1

25X1

Declass Review by NIMA / DoD

25X1

GROUP 1
Excluded from automatic
downgrading and declassification

TOP SECRET

DATE MARCH 1967

COPY 106

PAGES 47

TOP SECRET

25X1
25X1
25X1

DDI IMAGERY ANALYSIS STAFF

NAVAL BASE AND SHIPYARD 402

SEVERODVINSK, USSR

25X1

- 1 -

25X1

TOP SECRET

TOP SECRET

25X1

25X1

DDI IMAGERY ANALYSIS STAFF

ERRATUM For CIA/PIR 77110

1. Page 29, annotation 3, line 1 - cargo ship should read auxiliary.
2. Page 29, annotation 5, line 1 - delete last 8 words so that line 1 reads OKHTENSKIY Class ATR.
3. Page 34, annotation 5,
4. Page 37, annotation 8, line 2 - 430 should read 435.
5. Page 38, annotation K, line 5 - Figure 12a should read Figure 12b.

25X1

- 1a -

TOP SECRET

25X1

25X1
25X1



25X1
25X1
25X1
25X1

DDI IMAGERY ANALYSIS STAFF

SHIPYARD : NAVAL BASE AND SHIPYARD 402
LOCATION : SEVERODVINSK, USSR
GEO COORDS: 64-35N 039-50E

KEY TO ANNOTATIONS ON FIGURE 2

1. Possible "P-6(T)" Class target boat (LOA approx [REDACTED])
When viewed in stereo, a circular possible "MORNING GLORY" radar reflector can be seen atop the amidships section. The hull outline, in the area of the bow, cannot be readily discerned; however, a faint curved line can be seen on both sides of the hull forming a pointed bow similar to that of a "P-6" Class. A probable "P-6(T)" Class target boat was previously seen in this yard [REDACTED]
2. Unidentified probable AG (LOA approx [REDACTED]) inboard of two "J" Class SSG. Visible topside characteristics of this vessel include an L-shaped deckhouse forward, a large heavy mast immediately abaft the deckhouse, two possible deck cranes (these cranes appear similar to the cranes seen on the LEPSE Class AG) forward of amidships, superstructure just aft of amidships, four lifeboats aft (two in-line to port; two in-line to starboard), and a stack positioned between the aftermost lifeboats. This ship has apparently not moved from this position [REDACTED] Since that time "J" Class SSG have usually been sighted either outboard of or next to this ship. The evidence indicates that this ship serves as a probable tender for "J" Class SSG. [REDACTED]
3. Two "J" Class SSG (LOA of each approx 280'). Identification is based on size and position of the sails, visible blast deflectors, high freeboard, and overall hull outline of each. The outboard "J" Class SSG has both the forward and aft missile tubes in an elevated position. [REDACTED]
4. Unidentified AG (LOA approx 215'). This vessel has a mast positioned on the after edge of the forecandle and a small hatch (approximately 15 feet long and 10 feet wide) positioned approximately 70 feet aft of the bow. A second mast is located amidships. Light-toned linear imagery is visible extending from the area of the base of the amidships mast to the starboard edge of the vessel on an athwartships axis. This imagery appears to be raised roughly [REDACTED] above the deck. A long, narrow raised object (approximately 25 feet by 5 feet) is positioned between the amidships mast and the superstructure.

TOP SECRET

25X1

25X1

25X1

DDI IMAGERY ANALYSIS STAFF

A re-analysis [] reveals that this same ship was located (but not reported) in the deep water side of the main launch basin. Clearly visible at that time were the stack and superstructure aft and the raised object protruding approximately 25 feet forward of the superstructure. Of interest on the [] coverage, but also not reported, was the location of this ship parallel to two unidentified small craft (LOA of each approximately 80 feet) which were positioned upon the unflooded shallow side of the launch basin apparently in line with the two northernmost sets of tracks leading into the construction hall. These craft resemble two similarly configured small craft seen in the main launch basin []

25X1

25X1

25X1

[] coverage also revealed that snow had been removed from an area extending from the two 80 foot craft to the 215 foot AG. Snow had also been removed from the southernmost set of tracks leading into the north bay of the construction hall for a distance of at least 400 feet. This activity [] may have occurred just prior to the possible emergence of a vessel from the third track (from the north) of the main construction hall.

In reviewing all of the interim [] coverage [] it was found that [] a vessel previously reported as a "possible rectangular support barge (LOA approx 220') " was observed in the identical position on the deep water side of the main launch basin as this 215 foot stack-aft ship was []

[] It was further noted on the [] coverage that a "possible white line connects this vessel with the possible 'N' Class SSN on the unflooded shallow side of the launch basin". The "N" Class SSN appeared to be aligned with the center track leading into the north bay of the construction hall []

[] It is believed for the following reasons that the "220 foot...barge" seen in the main launch basin [] is most likely the 215 foot stack-aft auxiliary seen along the East Quay, Main Yard []

(a) The white superstructure arrangement at one end is similar - even to the slightly offset positioning of white imagery possibly equating to a lifeboat on the port side after superstructure. The rectangular white spot just before the forecastle is visible []

(b) The vessel [] appeared to be nearly identically positioned in the basin as the 215 foot stack-aft auxiliary [] only it was positioned stern-to the construction hall instead of bow-to the hall []

(c) The lengths obtained for the vessel in the basin are approximately the same as the stack-aft vessel - none of rectangular support barges have been measured at more than []

TOP SECRET

25X1

TOP SECRET

DDI IMAGERY ANALYSIS STAFF

25X1
25X1
25X1

25X1

[redacted] no association can be established between the submarines observed in the yard and the 215 foot stack-aft auxiliary. An association can be established, however, between the 215 foot stack-aft auxiliary and the possible "N" Class SSN in the basin [redacted]

25X1

25X1

25X1

5. Unidentified small craft on quay (LOA approx [redacted]) This vessel appears to be completely surrounded by scaffolding. Imagery possibly equating to this craft was visible in the same position [redacted]

25X1

25X1

25X1

6. Possible "PO-2" Class YAG on quay (LOA approx [redacted])

25X1

7. Unidentified barge on quay (LOA approx [redacted])

25X1

8. Unidentified barge (LOA approx [redacted])

This craft has a very small superstructure near the stern, a flat uncluttered deck, and a low freeboard. This vessel has not previously been observed in this yard. Larger, slightly modified barges of similar overall appearance have been observed at the Admiralty Shipyard, Leningrad, USSR (59-55N 030-17E). The Leningrad barges appear to have side walls which this barge lacks. [redacted]

25X1

25X1

9. Probable YTM/YTR (LOA approx 110').

10. Unidentified probable AG (LOA approx 245').

This vessel has a raised bow, small high superstructure amidships, stepped-down stern, and two pole masts (with cargo booms attached) - one approximately 55 feet from the bow and one approximately 55 feet from the stern. Two rectangular raised objects are visible on the deck between the forward mast and the amidships superstructure. An unidentified, possibly pentagonal raised object is located on the after edge of the forecastle. A ship of this description appears to have been berthed at this quay [redacted]

25X1

11. Unidentified small craft (LOA approx 70').

Visible characteristics include a relatively high superstructure positioned well up on the bow, a raised light-toned object just aft of amidships and a square stern.

12. Bucket dredge (LOA approx 210').

25X1

TOP SECRET

25X1
25X1
25X1
25X1
25X1
25X1

TOP SECRET

DDI IMAGERY ANALYSIS STAFF

13. Unidentified probable bulk carrier (IOA approx [redacted])
Visible characteristics include a forward superstructure topped by a mast, a long well deck (containing an unidentified light-toned raised linear image along its entire centerline length), a superstructure aft, and a stepped-down stern.
14. Unidentified probable bulk carrier (IOA approx [redacted])
This ship appears identical to the vessel at annotation 13 with the exception that two rectangular raised possible hatches are visible in the well deck, one at the forward edge of the well deck (measuring approximately 25 feet by 15 feet), and the other at the after edge of the well deck (measuring approximately [redacted] high-toned, raised linear imagery extends between the two possible hatches.

NOTE: The vessels at annotations 11-14 above are positioned just off the edge of this print. The eastern corner of the East Quay may be used to key the location of the vessels in the 50X inset relative to the area illustrated in Figure 2.

25X1
25X1

TOP SECRET



25X1
25X1

TOP SECRET

DDI IMAGERY ANALYSIS STAFF

25X1
25X1
25X1
25X1

SHIPYARD : NAVAL BASE AND SHIPYARD 402
LOCATION : SEVERODVINSK, USSR
GEO COORDS: 64-35N 039-50E

KEY TO ANNOTATIONS ON FIGURE 3

1. Unidentified small craft (LOA approx 80').
2. Six unidentified floating objects (dimensions of each approximately
Each of the six objects have two raised objects along the centerline approximately 15 feet apart. These floating objects are located three days later along the port side of the submarine. It is believed that these objects may function as pontoons for walkways out to the submarine when the basin is flooded.

25X1

25X1

25X1

3. Unidentified small craft (LOA approx underway.
4. Probable YTM (LOA approx
Identification is based on the high superstructure positioned well up on the bow and the overall rounded hull shape.

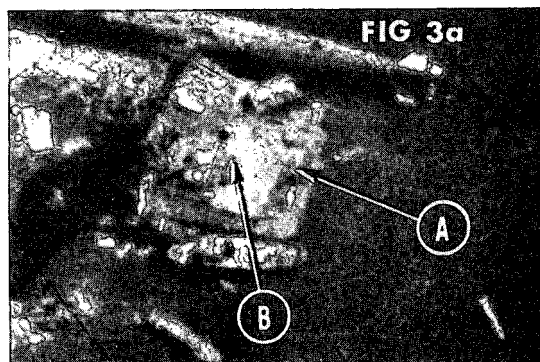
25X1

25X1

25X1

5. Very large floating crane (dimensions of platform roughly 160' by 80'). This appears to be the largest crane in the yard (floating or land-based). The platform edge closest to the construction hall is obscured by shadows. Several unidentified objects, not part of the crane, are located within a fenced-in area of the crane platform. These include two cylindrical objects, each approximately in diameter, positioned upright on their transverse axes. The height of these objects cannot be determined; however, it does not appear to be in excess of 5 feet.

25X1



6. Unidentified floating object apparently identical to the six unidentified floating objects at annotation 2 above.

25X1

TOP SECRET

25X1

25X1
25X1
25X1

Approved For Release 2002/10/21 : CIA-RDP78T05161A001500010005-8

DDI IMAGERY ANALYSIS STAFF

25X1
25X1
25X1
25X1
25X1
25X1
25X1
25X1
25X1

7. Possible "H" Class SSBN (visible LOA approx [REDACTED])
This identification was made possible by the subsequent receipt [REDACTED]
[REDACTED]
[REDACTED] To briefly summarize the rationale behind this analysis,
it is felt that the staging surrounding the position of the sail of
this submarine, when viewed in this position in the basin three days
later [REDACTED] is identical to the imagery observed on a
submarine located at the western end of the quay [REDACTED]
[REDACTED]
The submarine later berthed in that same position at Yagry Island [REDACTED]
[REDACTED] is confirmed to be a stripped-down "H"
Class SSBN. [REDACTED] The general hull outline of
this submarine appears identical on all three sightings.

25X1
25X1
25X1

The precise bow end-point on this submarine cannot be determined with
confidence. The submarine is no shorter than [REDACTED] to the indistinct
bow superstructure. Unidentified lineal imagery on the port side of the
bow extremity plus analysis of the shadow cast by the bow (the extremity
of which falls along the vertical plane of the caisson outside the door
to the construction hall) suggests, however, that the total length of
the submarine may be as long as 380 feet. The stripped-down "H" Class
SSBN later observed [REDACTED] at Yagry Island measures approximately
[REDACTED]

The following topside details are visible on this submarine:

25X1
25X1
25X1

- (a) A small raised object is positioned near the bow approximately 360 feet
forward of the stern. This object equates favorably to the small sonar
dome on "H" Class SSBN.
- (b) A raised object is visible approximately 330 feet forward of the stern.
- (c) The deck appears to be flat from the area of the possible sonar dome
back to a raised object positioned approximately [REDACTED] forward of the
stern. This raised object could be a portion of the sail which has not
been stripped away.
- (d) A long depressed area extends aft from the possibly intact portion
of the sail and gradually tapers back to a point approximately [REDACTED]
forward of the stern. Within this depression four raised objects are
visible along the centerline. The forwardmost object is positioned
immediately abaft the possibly intact portion of the sail (approximately
260 feet forward of the stern). The other three objects appear to be
spaced approximately [REDACTED] apart.

- 7 -

25X1

Approved For Release 2002/10/21 : CIA-RDP78T05161A001500010005-8

TOP SECRET

DO NOT DISSEMINATE TO USIA

(e) A depression measuring approximately [] long by roughly 10 feet wide is visible, to the port of centerline, approximately [] forward of the stern. Imagery possibly equating to a similar depression is faintly visible to starboard of the centerline. Submarine hull curvature and the angles of the taking camera preclude a more positive determination.

(f) Port and starboard stabilizers, port and starboard stern planes, and a vertical fin are clearly visible on the stern.

This submarine may equate to the "probable submarine" observed at berthing space #4 along the Main Quay []

No vertical screens were observed in berthing space #4 at that time. A re-examination of the [] imagery in berthing space #4 reveals that neither extremity of the submarine resembled the very rounded bow observed on the possible "H" Class SSN at Yagry Island on a nearly parallel viewing axis []

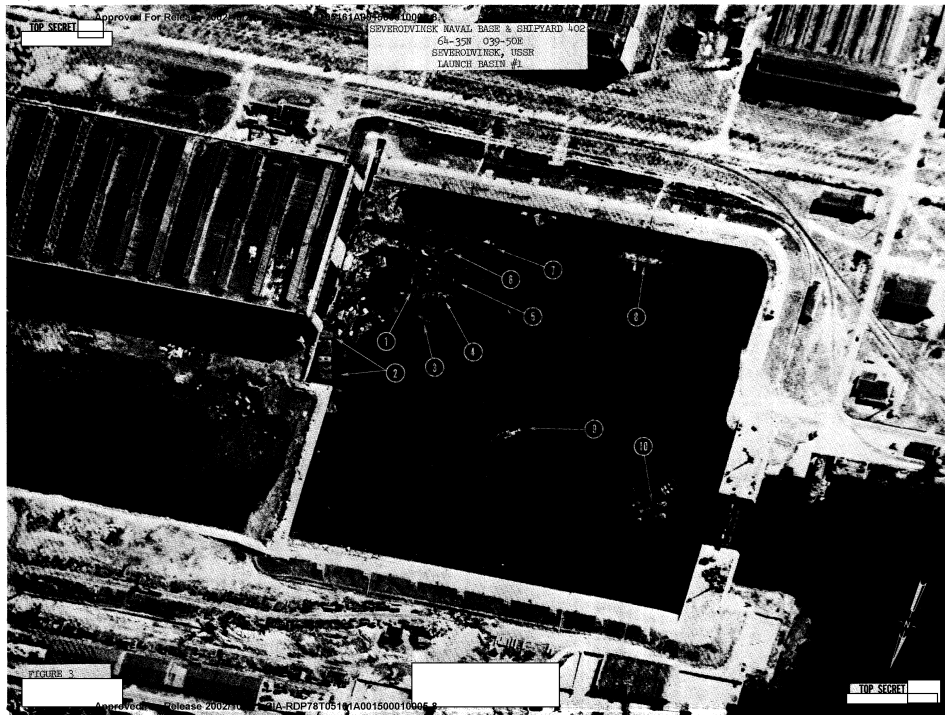
The only major submarine movements noted [] have been the departure of the possible "H" Class SSN [] the departure of the "probable submarine" from berthing space #4, the arrival of an "H" Class SSN into the Yagry Island Wet Basin (annotation 13, Figure 3 of this report), and the arrival of the "possible "H" Class SSN" in the main launch basin.

8. Unidentified small barge (IOA approx []) Visible topside characteristics include three hatches along the centerline and a small raised possible wheelhouse aft. This craft is in line with, and is probably resting on, the southernmost of the six sets of tracks leading into the main construction hall.

9. Possible YTM/YTR (IOA approx []) This craft has a superstructure well forward of amidships. The area aft of amidships is uncluttered, and the overall hull shape compares favorably to that of a tugboat.

10. Two unidentified small craft (IOA of each approx []) Each of these two craft is nearly rectangular in shape although the end of each nearest the caisson is slightly rounded. A slightly raised flat amidships island covers approximately 3/5ths of each vessel. An unidentified small structure is positioned atop and at one end of the superstructure islands of each of these vessels. Two similar looking craft were previously positioned in the basin [] but not reported. At that time they were aligned with the northernmost two tracks leading into the construction hall. See annotation 4, Figure 2 of this report.

TOP SECRET



TOP SECRET

25X1



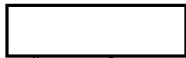
25X1

25X1

DDI IMAGERY ANALYSIS STAFF

SHIPYARD : NAVAL BASE AND SHIPYARD 402
LOCATION : SEVERODVINSK, USSR
GEO COORDS: 64-35N 039-50E

KEY TO ANNOTATIONS ON FIGURE 4

1. Possible ADG (LOA approx 
This vessel has its superstructure on the after half of the ship. Four small rectangular white images on both the starboard and port sides of the deck area between the bridge and the forecastle resemble the deperming coils carried by the SEKSTAN and KHABAROVSK Class ADGs.
2. Three small rectangular floating platforms.
3. Floating workshop (overall dimensions approx 
At least four small shacks are visible on the top of this craft.
4. Three floating vertical screens (LOA of each roughly 50') positioned outboard of an "E-II" Class SSGN.
One screen is positioned along the port bow forward of the number 1 missile launcher; one is alongside the number 3 missile launcher; and one alongside the number 4 missile launcher.
5. Portal jib crane.
The rails supporting this crane and the other four cranes along this quay are approximately 35 feet apart.
6. Unique auxiliary (LOA approx 225') positioned inboard of an "E-II" Class SSGN.
Visible characteristics of this ship include: a pointed bow; a long bridge, measuring approximately 30 feet long by 20 feet wide, positioned just forward of a single stack amidships; wings across the leading edge of the bridge; a small lifeboat on the port quarter of the raised after deck; and a stepped-down stern. The shadow cast by the crane at annotation 5 above obscures the amidships portion of this ship. A probable catwalk extends from this ship to the sail of the outboard submarine.
7. "E-II" Class SSGN (visible waterline length approx 
Identification is based on the four sets of missile launchers and exhaust deflectors, size and position of sail, positions of the fore and aft emergency telephone buoys, and the position of the fore and aft rescue

25X1

25X1

25X1

TOP SECRET

25X1

TOP SECRET

DDI IMAGERY ANALYSIS STAFF

bell seating rings. The number 1, 2, and 4 missile launchers are in an elevated position. This submarine is berthed bow-to the main launch basin. This may be the same submarine seen [redacted] with the upper deck plating removed from the number 3 and 4 missile launchers; however, this submarine appears to have all visible topside detail intact.

8. "E-II" Class SSGN (visible waterline length approx [redacted] berthed stern-to the main launch basin.

Visible characteristics aiding in this identification include the size and position of the sail, four sets of blast deflectors, and the waterline length. The number 3 missile launcher is elevated. Two vertical screens are positioned outboard of the submarine at annotation 10 below. At least two white lines are visible leading from the submarine to the rectangular service barge at annotation 9 below (a pipe or catwalk leads from the barge to a position over the port side number 3 blast deflector of the submarine; the other pipe or duct leads from the barge to an area immediately abaft the number 2 blast deflector and forward of the number 3 missile launcher).

9. Rectangular submarine service barge (LOA approx [redacted] positioned inboard of an "E-II" Class SSGN.

This barge is fitted with an amidships superstructure roughly 125 feet in length. A very high slender mast, vent, or stack is positioned on the westernmost end of the main superstructure. A shorter possible stack or vent, roughly [redacted] tall, is visible on the westernmost end of the barge, and a possible pipe or duct is visible amidships, extending athwartships from the outboard side, over the superstructure, to the inboard, or pier, side. A cylindrical vent is located on the outboard edge of the main superstructure in a line with the raised number 3 "E-II" launcher. The topside configuration of this barge is nearly identical to the barge observed in this same position [redacted] - even to the location and appearance of the white line over the superstructure.

10. Two floating vertical screens (LOA of each roughly 50'). One screen is positioned alongside the number 1 missile launcher (which is not elevated), the other screen is alongside the raised number 3 missile launcher.

TOP SECRET

25X1

Approved For Release 2002/10/21 : CIA-RDP78T05161A001500010005-8

TOP SECRET

25X1

25X1

DDI IMAGERY ANALYSIS STAFF

11. Small rectangular support barge (overall dimensions approx 90' by 25'). This craft has a superstructure at one end and appears to resemble a small barge observed at the next berthing space west along this quay []

25X1

25X1

12. Portal jib crane.
This crane appears to be identical to the crane at annotation 5 above.

13. Rectangular submarine service barge (IOA approx [] positioned inboard of an "E-II" Class SSGN.
A box-like superstructure is visible extending approximately 10 feet from the easternmost end of the barge to approximately amidships where it is lost in the shadow cast by the large crane at annotation 16. This shadow obliterates most of the eastern half of this barge. This is not the same barge observed in this position []

25X1

25X1

25X1

[] as evidenced by a lack of possible cranes on the superstructure.

14. Three floating vertical screens (IOA of each roughly 50') positioned outboard of the raised number 1, 3, and 4 missile launchers of an "E-II" Class SSGN.

15. "E-II" Class SSGN (visible waterline length approx 375'). Identification is based on the length of sail, position of the raised number one missile launcher, and position of the aftermost blast deflector (the center of which is approximately 210 feet from the leading edge of the sail). This submarine is moored stern-to the main launch basin. The number 1, 3, and 4 missile launchers are elevated. The berthing arrangement of this submarine, the rectangular submarine service barge, and the three floating screens probably equate to the unidentified object, rectangular support barge, and the three floating screens seen []

25X1

25X1

16. Large portal jib crane.
This crane is significantly larger than the other 4 cranes positioned along this quay. It appears to be of much heavier construction and has a higher base and longer boom. It has a significantly greater lift capability than that of any of the other four cranes positioned along this quay.

17. Rectangular submarine service barge (IOA approx [] alongside quay. The empty berthing space outboard of this barge was previously occupied by a probable submarine [] A box-like superstructure is

25X1

25X1

- 11 -

Approved For Release 2002/10/21 : CIA-RDP78T05161A001500010005-8

TOP SECRET

25X1

25X1
25X1
25X1

TOP SECRET

DDI IMAGERY ANALYSIS STAFF

visible, starting approximately 10 feet from the westernmost end of the barge and extending eastward approximately 115 feet. At least two sets of possible vents are visible atop this superstructure. A tall mast, stack, or vent is visible near the westernmost end of the superstructure. A shorter, narrower superstructure starts approximately 15 feet from the easternmost end of the barge and extends approximately 45 feet toward amidships. This barge appears to be identical to the one observed in this position [REDACTED]

25X1
25X1

18. Portal jib crane.
This crane is smaller and of much lighter construction than any of the other four cranes positioned along this quay.

25X1

19. "N" Class SSN (LOA approx [REDACTED])
The following visible topside detail contributed to this evaluation: (a) a "staybrite" belt plainly visible on the broad rounded bow; (b) the shape of the visible portions of the scaffolded sail; and (c) the overall hull shape. Additional visible topside detail includes the following which are keyed to the annotations on Figure 4a: (1) a raised object (approximately [REDACTED] long) positioned approximately [REDACTED] from the bow; (2) the sail, completely surrounded by scaffolding; and (3) a strip of hull plating, approximately [REDACTED] long, that is removed from the top and both sides of the submarine. This plating is removed from an area immediately abaft the sail (approximately [REDACTED] from the bow). The removed hull plating exposes a flat area approximately 15 feet wide that extends the full length of the removed plating (approximately [REDACTED]). The area along both sides of the removed hull plating is the only visible area around the perimeter of the submarine that is not scaffolded. The lack of cylindrical imagery, when viewed from an oblique angle [REDACTED] [REDACTED] (which would be suggestive of an exposed pressure hull), the narrow width of visible imagery (the flat area), the lack of scaffolding along the sides in this area, and the short overall length of the submarine all suggest that this submarine is possibly cut in half and undergoing a lengthening process. The remaining items keyed to Figure 4a include: (4) a small light-toned shack (approximately [REDACTED] long) positioned approximately [REDACTED] from the bow; (5) a small raised object positioned approximately [REDACTED] from the bow; (6) clearly visible port and starboard stabilizers; and (7) the port and starboard stern planes.

25X1
25X1

25X1
25X1

25X1
25X1

25X1
25X1
25X1

[REDACTED] "N" Class SSN, approximately [REDACTED] in length was observed in this same floating dock (Figure 4b). The annotations to Figure 4b refer to similar imagery described by the same annotation on the [REDACTED] submarine (Figure 4a). [REDACTED]

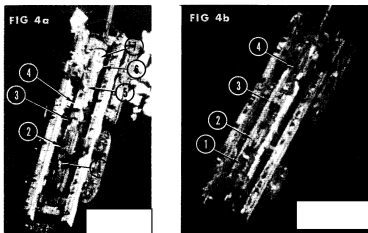
25X1

TOP SECRET

25X1
25X1
25X1
25X1
25X1

TOP SECRET

DDI IMAGERY ANALYSIS STAFF

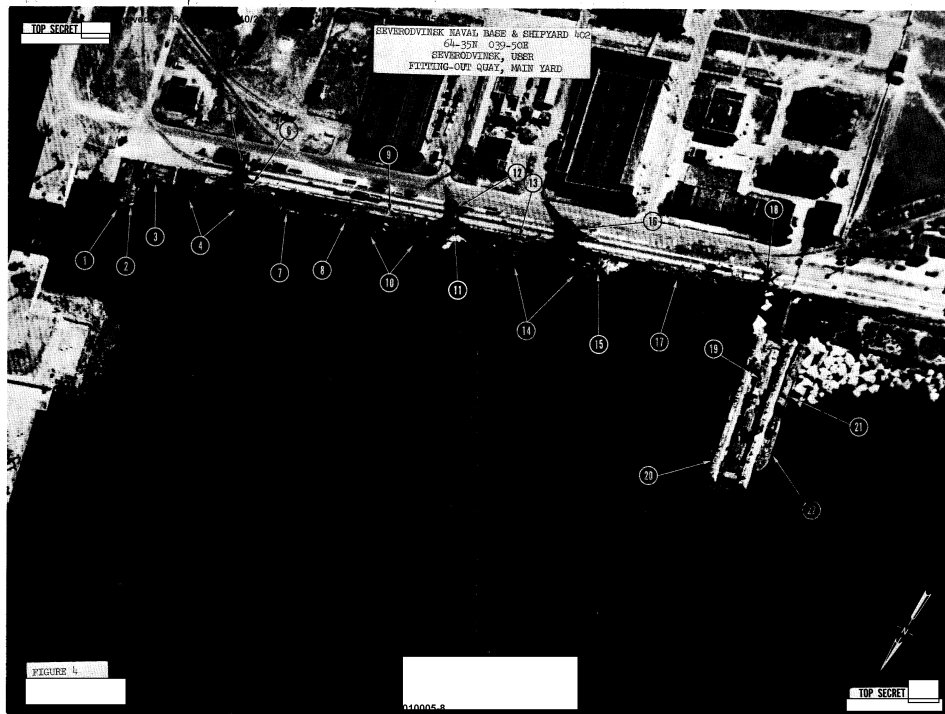


25X1
25X1

20. Floating dock (LOA of walls approx 425').
A small jib crane is positioned on each wall of the dock. An unidentified craft is berthed alongside the northern half of the east wall of the dock.
21. Rectangular submarine service barge (LOA approx [redacted]).
A box-like superstructure starts approximately 10 feet from the end closest to the quay and extends approximately 140 feet. A small square house is positioned on the south end of the superstructure, and a tall mast, vent, or stack is visible on top of and approximately 25 feet from the southern end of the superstructure. At least 4 small raised objects (possibly vents) are visible atop the superstructure, and a small possible crane or winch is positioned on the north end of the barge. This is probably the same barge observed in this position [redacted].
22. Unidentified probable AG (LOA approx [redacted]).
This vessel has a raised bow, superstructure aft, and a stepped-down stern. No hatches are visible. A possible mast or boom is positioned on the raised bow, and the deck has a very cluttered appearance. A similar vessel was observed in this position, but not reported, on [redacted] coverage of Shipyard #02.
This ship could not be identified on [redacted] coverage of Shipyard #02.

25X1
25X1
25X1
25X1
25X1

TOP SECRET



25X1
25X1
25X1

25X1

Approved For Release 2002/10/21 : CIA-RDP78T05161A001500010005-8

TOP SECRET

25X1

DDI IMAGERY ANALYSIS STAFF

SHIPYARD : NAVAL BASE AND SHIPYARD 402
 LOCATION : SEVERODVINSK, USSR
 GEO COORDS: 64-35N 039-50E

25X1

KEY TO ANNOTATIONS ON FIGURE 5

1. Rectangular submarine service barge (LOA approx [] inboard of a catamaran barge.
 A box-like superstructure (approximately [] long) is positioned approximately 45 feet from the westernmost end of the barge. A tall mast, vent, or stack is positioned on the extreme western end of the superstructure and two small, unidentified, raised light-toned objects (possibly vents) are positioned along the eastern half of the superstructure. A small square light-toned object (measuring approximately 10 feet on a side) is positioned on the westernmost end of the barge. A heavy light-toned line, possibly a catwalk or piping, is visible extending between the barge and the stern of the "N" Class SSN at annotation 4 below. Unannotated imagery, probably equating to this barge, was visible inboard of the catamaran vessel []
 [] The position of the possible vents, general superstructure configuration, and small square light-toned object at one end equate to the topside detail visible on a "probable RADCON/DECON" barge berthed inboard of an "N" Class SSN at the western end of the quay []

25X1

25X1

25X1

25X1

2. Catamaran vessel (approx maximum LOA [] See Figure 5A.
 This vessel is composed of two parallel floats, each approximately 300 feet in length, spaced 60 feet apart. They are connected by two massive, angular-shaped arches that rise roughly 50 feet above the floats. Nine probably equally spaced "frames", each semicircular and angular in shape, are suspended between the catamaran floats. The angular portion above and the semicircular arc below join and apparently pivot at the point where the frame is suspended from each float. The nine frames are connected to each other, fore to aft, by longitudinal members located at the top and bottom of each frame. This arrangement allows the frames to be positioned in the two modes depicted on Figure 5a - "retracted" [] and "extended" [] these frames were observed on the fitting-out quay []
 When the frames are in the "extended" mode their approximate internal clearances are as follows: maximum internal height (as depicted in the cross-section view - Figure 5a) - [] maximum horizontal clearance just above the waterline - 40 feet; and minimum width across the top of the angular frame []

25X1

25X1

25X1

25X1

- 14 -

TOP SECRET

TOP SECRET

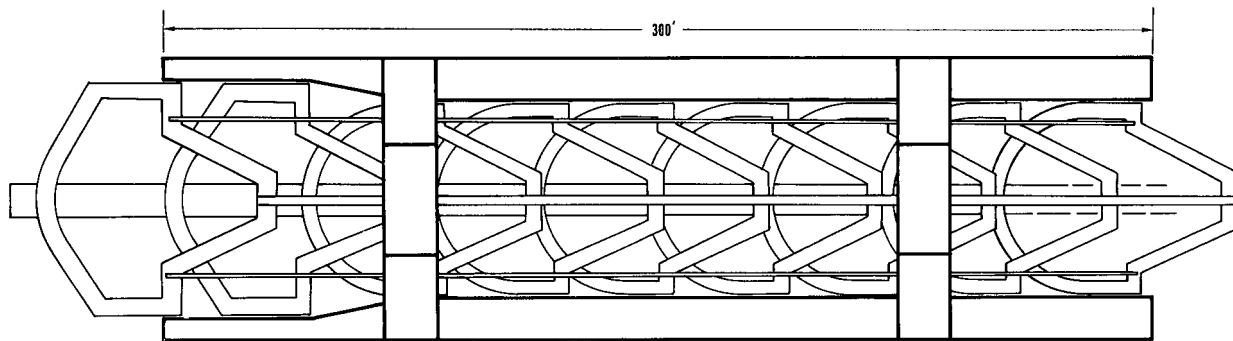
Approved For Release 2002/10/21 : CIA-RDP78T05161A001500010005-8

UNIDENTIFIED NEW VESSEL

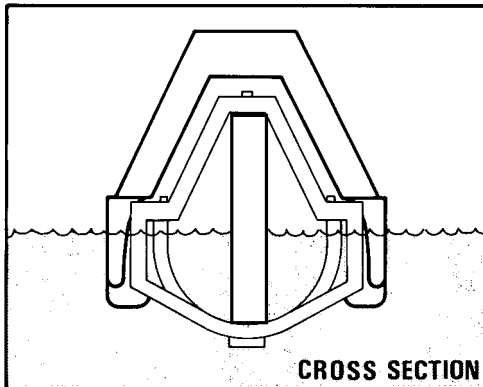
SEVERODVINSK, USSR

25X1

25X1



OVERHEAD VIEW

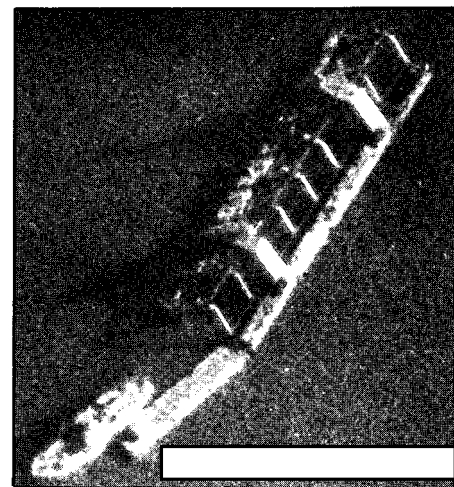
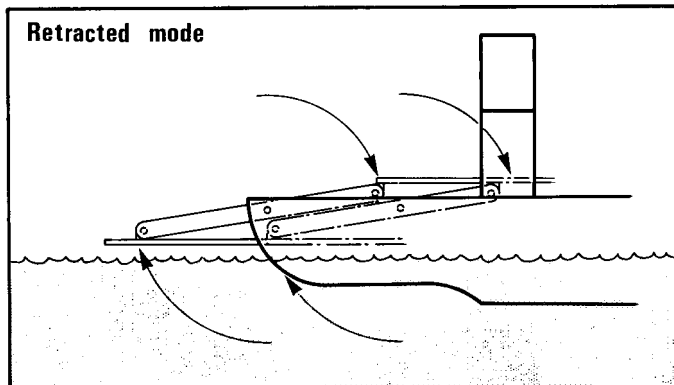


CROSS SECTION

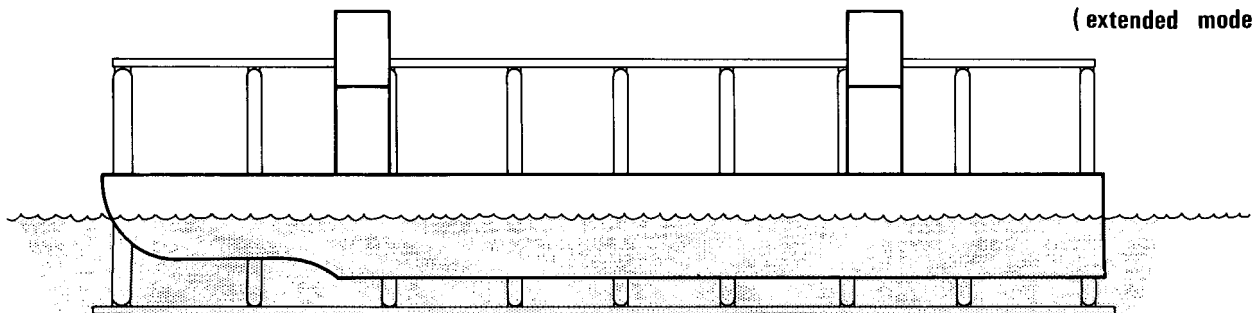


25X1

25X1



25X1



(extended mode)

SIDE VIEW

25X1

25X1

25X1

Figure 5a

Approved For Release 2002/10/21 : CIA-RDP78T05161A001500010005-8

TOP SECRET

25X1
25X1
25X1

TOP SECRET

DDI IMAGERY ANALYSIS STAFF

25X1
25X1
25X1
25X1
25X1
25X1
25X1

Components of this vessel were first observed [redacted] on the fitting-out quay and side launching way [redacted]. Its actual erection was accomplished on the side launching way [redacted] this vessel was first observed in the water. The vessel is seen on a later mission [redacted] in the "extended" mode in the Nikol'skoye estuary with a barge and a SEKSTAN Class ADG alongside.

3. Unidentified barge (LOA approx 90') positioned off the starboard quarter of the "N" Class SSN at annotation 4 below. The deck of this barge has a small house just forward of amidships, an arch-roofed probable shack just aft of amidships, and an overall cluttered appearance. A probable catwalk is visible extending from the barge (just forward of the arch-roofed shack) across the deck of the submarine inboard to the quay. A probable pipe, duct, or catwalk extends from the bow of the barge to an area on the submarine approximately 255 feet from the bow. Faint imagery possibly equating to a second pipe or duct is visible between the small house located just forward of amidships on the barge to a raised object on the deck of the submarine (approximately 275 feet aft of the bow). Tenuous imagery possibly equating to this barge was in approximately this same position, but not reported [redacted]

25X1
25X1

4. "N" Class SSN (visible waterline length approx 355'). Identification is based on the clearly visible "staybrite" belt extending around the broad rounded bow, the shape of the visible portion of the staging around the sail, and the approximate distance from the bow to the visible leading edge of the sail (approximately [redacted]). It appears that the staging does not obscure the rounded leading edge of the sail; therefore, both end-points for the sail-to-bow measurement are visible. Port and starboard possible bow planes are faintly visible. A small shack is positioned just forward of the completely scaffolded sail. A pipe or duct extends from the area of the after edge of the sail across the top of the rectangular submarine service barge's superstructure (annotation 5 below). It cannot be discerned whether this pipe or duct terminates on the barge or continues onto the quay.

25X1

A slightly raised cylindrical object (diameter approximately 10 feet) is visible just abaft the aftermost portion of the sail scaffolding. The center of the hole is approximately 40 feet aft of the leading edge of the sail. Two raised possibly circular objects are positioned along the centerline immediately abaft the sail scaffolding. A possible shack (approximately [redacted]) is positioned to the port of centerline

25X1

- 15 -

25X1

TOP SECRET

TOP SECRET

25X1

25X1

25X1

DDI IMAGERY ANALYSIS STAFF

approximately 165 feet from the bow. A probable catwalk extends from the shack across the deck of the rectangular submarine service barge (between the two superstructures) and enters a small shack on the quay. A raised square shack (approximately 10 feet on a side) is visible starboard of the centerline approximately 210 feet aft of the bow. A pipe or duct extends from an area approximately 255 feet aft of the bow to the bow of the barge moored outboard of the submarine at annotation 3 above.

A raised object is positioned in the area of, and possibly over, the aft rescue bell seating ring. This object is approximately 15 feet long by 5 feet wide. The center is apparently circular (approximately 5 feet in diameter) and raised slightly higher than the ends of this object. This submarine is berthed stern-to the main launch basin.

25X1

25X1

25X1

5. Rectangular submarine service barge (LOA approx [redacted])
A box-like rectangular superstructure, approximately 105 feet long, begins approximately 15 feet from the westernmost end. A probable vent is positioned near each end of this superstructure. A shorter superstructure (approximately 40 feet) is positioned near the easternmost end of the barge. The superstructure configuration of this barge most closely resembles the support barge observed in berthing space #3 along the Main Quay [redacted]
[redacted] However, no cranes are observed on this barge.

25X1

25X1

25X1

6. Portal jib crane.
This crane is approximately the same size as the cranes at annotations 5 and 12, Figure 4 of this report.

7. Floating jib crane (approximate dimensions of base 80' by 65').
This is the second largest floating crane in the yard. This crane was previously observed, but not reported, in this basin [redacted]
[redacted]

25X1

8. "PO-2" Class YAG (LOA approx [redacted]) alongside floating crane.
Identification is based on proportioning of main superstructure, lower after superstructure extension, and a possible ventilator. No armament is visible on this craft.

25X1

25X1

- 16 -

TOP SECRET

25X1

TOP SECRET

SEVERODVINSK NAVAL BASE & SHIPYARD 402
64-35N 039-50E
SEVERODVINSK, USSR
FITTING-OUT QUAY & LAUNCH BASIN #2

FIGURE 5

TOP SECRET

25X1
25X1

25X1
25X1
25X1
25X1

TOP SECRET

25X1
25X1
25X1
25X1

DDI IMAGERY ANALYSIS STAFF

SHIPYARD : NAVAL BASE AND SHIPYARD 402
LOCATION : SEVERODVINSK, USSR
GEO COORDS: 64-35N 039-50E

KEY TO ANNOTATIONS ON FIGURE 6

1. Eight Polish "TR-40" Class MSB on quay (LOA of each approx [REDACTED]) [REDACTED] 25X1
2. Unidentified small craft on quay (LOA approx [REDACTED]) 25X1
25X1
3. "P-6(T)" Class PT on quay (LOA approx 85').
4. Five probable "NYRYAT-2" Class YDT on quay (LOA of each approx 70').
Similar vessels were seen in this position [REDACTED] Breaks across the
main superstructure and raised imagery on the sterns of 3 of these craft 25X1
distinguish them from the "PO-2" Class YAG.
5. Unidentified small craft on quay (LOA approx [REDACTED]) 25X1
Imagery equating to the craft at annotations 1-5 was observed in this
position on the quay, but not reported [REDACTED] 25X1
6. Two probable "NYRYAT-2" Class YDT on quay (LOA of each approx 70').
7. Unidentified small craft on quay (LOA approx [REDACTED]) 25X1
8. "POZHARNEY-1" Class YTR (LOA approx 105').
Light-toned objects on mast, possible reels on deck abaft superstructure,
and a raised fantail are all clearly visible. [REDACTED] 25X1
[REDACTED]
9. Unidentified probable barge (LOA approx [REDACTED]) 25X1
This craft contains two hatches forward of the stern-mounted superstructure. 25X1
An upright cylindrical object, approximately [REDACTED] in diameter, is positioned 25X1
between the hatches.
10. Unidentified vessel (LOA approx [REDACTED]) 25X1
11. Possible floating workshop (LOA approx [REDACTED]) 25X1
[REDACTED]

25X1
25X1

TOP SECRET

25X1
25X1
25X1

TOP SECRET

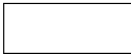
DDI IMAGERY ANALYSIS STAFF

12. Unidentified vessel (LOA approx [redacted])
Lack of a centerline catwalk over the depressed well deck and the lack of cargo hatches suggest that this vessel is not an oiler or a bulk cargo carrier.
13. SEKSTAN Class ADG (apparent LOA approx [redacted])
Four light-toned rectangular images placed in a line along each edge of the foredeck equate to the reels for the deperming coils on the SEKSTAN Class.
14. OKHTENSKIY Class ATR (visible length approx 150').
Superstructure and lifeboat placement equate to this class.
15. Unidentified small craft (LOA approx [redacted])
16. "TOPLIVO-1" Class YO (LOA approx [redacted])
17. Two "TOPLIVO-2" Class YO (LOA of each approx [redacted])
[redacted]
18. "TOPLIVO-1" Class YO (LOA approx [redacted])
A high catwalk is clearly visible. [redacted]
19. "SHALANDA-1" Class YF (LOA approx [redacted])
The crane between the 2 forward hatches is visible.
20. Unidentified probable tug (LOA approx 150').
21. Probable LENTRA Class Trawler - type unknown (LOA approx 125').
Additional structure above the foredeck extends approximately [redacted] forward of the main superstructure.
22. Unidentified vessel (visible length approx [redacted])
23. "T-43" Class MSF (LOA approx 190').
This unit appears to differ from the standard MSF version in that 4-6 white objects are visible atop the mast. It is not known if this imagery could equate to either radar(s) or reflector(s). This ship appears to be fully armed.
24. Large Missile Target Barge (YAGT) alongside quay (LOA approx 340').
A ring of at least seven probable reflectors can be seen above the deck of this vessel. [redacted]

25X1

TOP SECRET

25X1
25X1
25X1
25X1
25X1



TOP SECRET

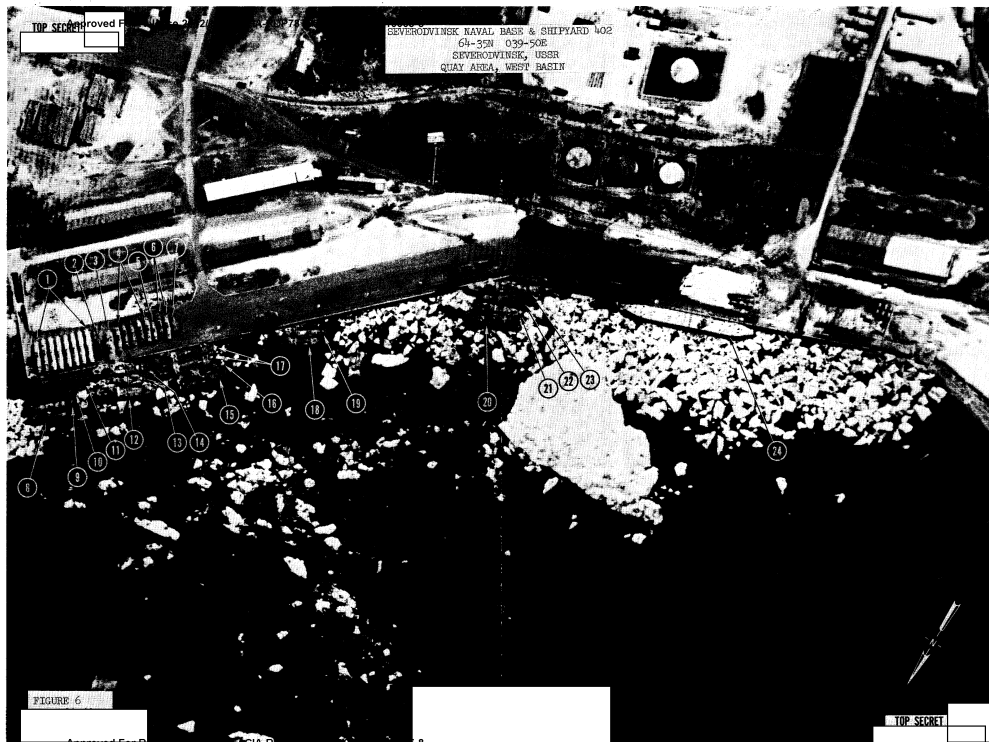
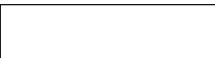


DDI IMAGERY ANALYSIS STAFF



NOTE: Poor end-point definition due to floating ice and lack of good cross-checks for scaling values may account for fluctuations in vessel lengths at annotations 8 through 24 above.

TOP SECRET



25X1
25X1
25X1

TOP SECRET

25X1
25X1
25X1

DDI IMAGERY ANALYSIS STAFF

SHIPYARD : NAVAL BASE & SHIPYARD 402
LOCATION : SEVERODVINSK, USSR
GEO COORDS: 64-35N 039-50E

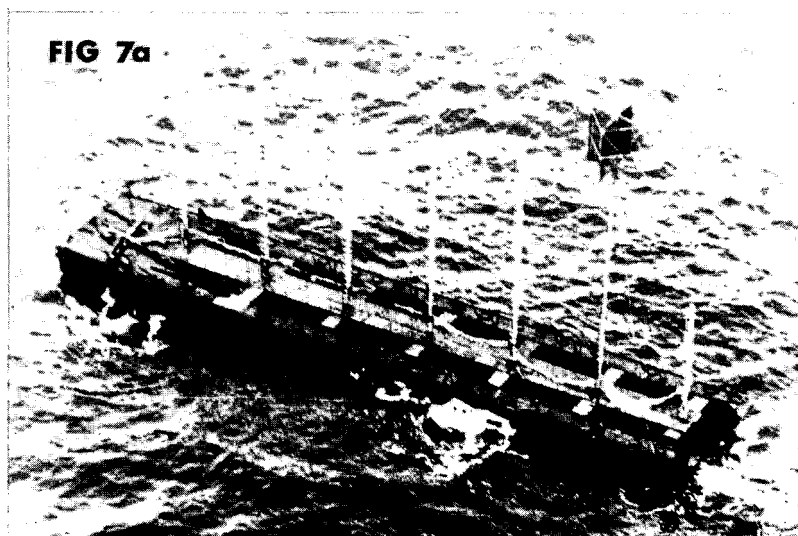
25X1

KEY TO ANNOTATIONS ON FIGURE 7

1. Probable catamaran YAGT (LOA approx [REDACTED])
A probable catwalk extends approximately 190 feet along the centerline. Eleven evenly spaced probable supports extend across the athwartships axis forming a supporting platform for the catwalk. Twelve evenly spaced masts (approximately [REDACTED] apart) are positioned along the catwalk (one at each catwalk support intersection). This barge appears similar to a shipwrecked stern half of a catamaran YAGT photographed [REDACTED]. This stern half has been measured at approximately 115 feet in length and has seven evenly spaced masts [REDACTED]. See inset below (Figure 7a) for a photograph of the stern half of the wrecked catamaran YAGT.

25X1

25X1
25X1



25X1

2. Probable catamaran YAGT (LOA approx [REDACTED])
At least seven masts are visible, positioned approximately 20 feet apart, along the centerline amidships. This barge differs from the barge at annotation 1 above as follows: (a) each of the two parallel hulls has a depression amidships for approximately 3/4ths of its length; (b) the centerline "catwalk" is raised above the twin depressed catamaran hulls.

25X1

TOP SECRET

25X1

25X1
25X1
25X1

TOP SECRET

DDI IMAGERY ANALYSIS STAFF

The barge at annotation 1 above appears to have its ends, parallel hulls, catwalk, and athwartship supports at the same level. The catamaran barge at annotation 2 appears to be the same barge observed outboard of an "N" Class SSN at the Outfitting Quay, Main Yard

25X1
25X1
25X1

3. Probable YAGT (LOA approx [redacted])
At least six masts are visible along the centerline. This barge appears to be of single hull construction.
4. Unidentified cylindrical floating object (visible approx length 45'; approx diameter 25').
The end of this object facing the sun appears hemispherical. The other end of the object appears to have a slight flange; however, due to shadows and the angle of the taking camera the end of the object away from the sun cannot be discerned.
5. Short catamaran target barge (LOA approx [redacted])
Seven evenly spaced vertical masts along the centerline are visible.
6. Probable floating pier section (LOA approx [redacted])
7. Unidentified probable AKL (LOA approx [redacted])
This vessel has a superstructure aft and two hatches (each approximately 40' by 20') along the centerline. A deck crane is positioned between the two hatches.
8. Unidentified yard craft (LOA approx [redacted])
9. BUSSARD Class AKL (LOA approx [redacted])
10. Unoccupied transporter dock (LOA approx [redacted] inside length approx 385'; outside beam approx 50'; inside beam approx [redacted])
The walls of this dock are cut-down for the aftermost 55 feet; i.e., the walls are roughly half as high off the dock floor as the forward portion of the walls. Docks with similar cut-down walls have been seen at only one other installation - Gorkiy Shipyard 112, Gorkiy, USSR (56-22N 043-53E). All docks seen at the Gorkiy Shipyard [redacted] have had similar cut-down walls and have been roughly the same size as this dock.
[redacted]
11. Small transporter dock (LOA approx [redacted] inside length approx [redacted] outside beam could not be determined; inside beam approx [redacted])

25X1
25X1
25X1
25X1
25X1
25X1

25X1

TOP SECRET

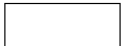
25X1
25X1
25X1
25X1
25X1



TOP SECRET



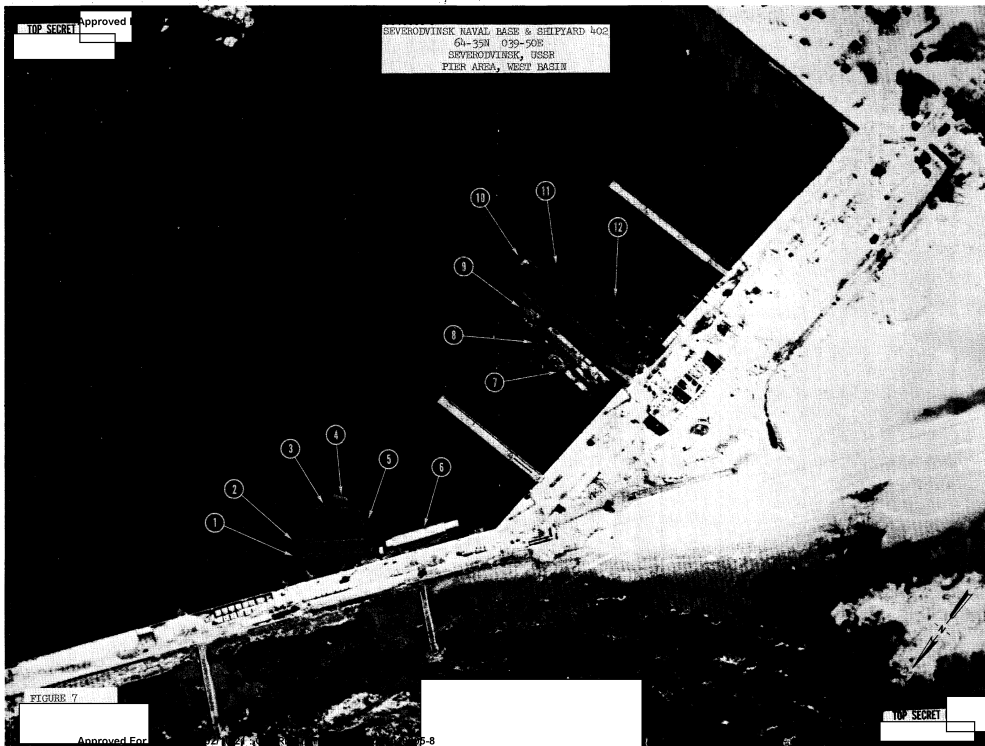
DDI IMAGERY ANALYSIS STAFF



25X1
25X1
25X1
25X1

12. Small transporter dock (LOA approx [redacted] inside length approx [redacted] outside beam [redacted] inside beam approx 25'). The docks at annotations 10, 11, and 12 above have the same configuration and dimensions as the three empty docks berthed along the quay on the south side of the West Basin [redacted]

TOP SECRET



25X1
25X1

25X1
25X1
25X1

25X1

Approved For Release 2002/10/21 : CIA-RDP78T05161A001500010005-8

DDI IMAGERY ANALYSIS STAFF

25X1

25X1

SHIPYARD : NAVAL BASE & SHIPYARD 402
 LOCATION : SEVERODVINSK, USSR
 GEO COORDS: 64-35N 039-50E

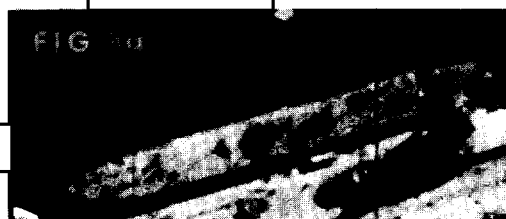
25X1

KEY TO ANNOTATIONS ON FIGURE 8

1. Large Missile Target Barge - YAGT (LOA approx [REDACTED])

25X1

A circle of probable reflectors and a possible conical-shaped heat generator are visible on the deck of this vessel. See inset Figure 8a at right for a complete view of this craft.

25X1
25X1

2. Probable OKHTENSKIY Class ATR Med-moored to quay (apparent LOA approx [REDACTED])

25X1

This tugboat appears identical to the OKHTENSKIY Class ATR observed in a transporter dock alongside this quay [REDACTED]

25X1

25X1
25X1
25X1
25X1

[REDACTED] It is noted, however, that the reported length of the OKHTENSKIY [REDACTED] is [REDACTED] shorter than on this coverage. A cross-check of the measurement [REDACTED] reveals that the discrepancy [REDACTED] is accounted for by imagery degradation on both the bow and stern of this vessel. The visible LOA of the OKHTENSKIY [REDACTED]

25X1

25X1

25X1

25X1

3. "G" Class SSB (visible waterline length approx [REDACTED])

All but the forward 25 feet of the sail of this submarine has been removed revealing a portion of the missile tubes. The upper portion of these tubes does not appear to be in place. Scaffolding appears to be in place around the submarine slightly above the waterline from a point approximately 10 feet aft of the bow to approximately 60 feet forward of the stern. Portions of the deck plating appear to be removed in the area abaft the sail. An elevated protrusion over the bow extremity of this submarine resembles an icebreaker bow. This impression is also caused by the gradual downward slope along the after edge of this object as it meets the foredeck of the submarine. A bow sonar cannot be discerned on this photography.

- 23 -

TOP SECRET

25X1

TOP SECRET

DDI IMAGERY ANALYSIS STAFF

25X1

25X1

25X1

25X1

It is not believed that this is the same stripped-down "G" Class SSB observed along this quay [redacted] since an interim sighting of a possible "G" with an apparently intact sail was noted in this position [redacted] In addition, the (possible) "G" Class SSB observed [redacted] [redacted] are all observed in the same position - a position roughly 200 feet further west along this quay than was the "G" observed [redacted]

25X1

25X1

25X1

25X1

4. Peaked roofing section for portable weather sheds. Thirteen roof sections can be observed on the quay.
5. Rectangular submarine support barge (visible length approx 175'). Note the shadow cast by the very tall and narrow possible "vent" near the end of the barge furthest from the shore. A possible gangway or other physical connection can be seen between the deck level of the barge and the floor of the adjacent floating dock. Except for the removal of a small shed from its outboard end this barge appears identical to the barge observed by the "H" dock [redacted]
[redacted]
6. "PM-124" Class YRSN (visible length approx [redacted]) The stern of this ship is hidden in shadow. The tall "A" frame, bow configuration, superstructure, and lifeboat placement aid in this identification. A rectangular-shaped enclosure (open across the top) approximately [redacted] is positioned on the starboard side of the after well deck. [redacted]
7. "H" Class SSBN in floating dock (distance from exposed bow to end of sheds over stern is roughly [redacted]) The area of the sail of this submarine is covered with weather sheds beginning at a point approximately 50 feet from the bow and running approximately 120 feet aft. The length across the top of the raised sail covering is approximately [redacted] The bottom leading edge of the raised structure is positioned approximately [redacted] from the bow. A single peaked-roof covering is positioned over the hull approximately 220 feet from the bow. The entire stern portion, beginning at a point approximately 310 feet from the bow, is covered with weather sheds. [redacted]
[redacted]
8. Large floating dock (approximate dimensions are: length of walls - [redacted] maximum inner width - 75'; maximum outer width [redacted])

25X1

25X1

25X1

25X1

25X1

25X1

25X1

25X1

25X1

25X1

25X1

25X1

25X1

TOP SECRET

25X1
25X1
25X1

Approved For Release 2002/10/21 : CIA-RDP78T05161A001500010005-8

TOP SECRET

DDI IMAGERY ANALYSIS STAFF

25X1
25X1

9. "G" Class SSB in basin (visible length of hull less staging - approx [REDACTED]
All but approximately the forward [REDACTED] of the sail of this submarine
has been removed. Two small weather sheds are positioned over the area
where a portion of the sail had been. Staging can be seen extending around
nearly all of the submarine. [REDACTED]

25X1

25X1

10. "G" Class SSB in basin (visible hull length approx [REDACTED]
The stern extremity may be hidden in shadow from basin wall. Staging
nearly surrounds this submarine as well as the one observed at annotation
9 above; however, this submarine has its sail in place and its stern
planes are visible. [REDACTED]

25X1

25X1

11. Rectangular submarine support barge in flooded portion of the basin (LOA
approx [REDACTED]
A single probable walkway is visible connecting this vessel to the dry
portion of the basin. A tall pole mast or vent is visible near the western
end of this barge. Although this is probably the same barge observed in
this position [REDACTED] it does not equate
in topside configuration to any of the barges at Severodvinsk [REDACTED]
This barge is very similar to barges observed [REDACTED] at
Gorkiy Shipyard. [REDACTED]

25X1

25X1

25X1

25X1

25X1

12. Rectangular submarine support barge in basin (visible length approx [REDACTED]
This barge is similar, although not identical, to the one seen at
annotation 11 above. A rectangular-shaped, light-toned structure is
positioned on the starboard side of the west end of the barge. A tall
pole mast or vent is visible at the western end of this barge. The upper
extremity of this imagery appears to spread apart in the form of a "Y".
In addition to the walkway connecting the barge to the basin floor addi-
tional lineal imagery can be observed extending from the barge over the
water towards the area abaft the sail of the "N" Class SSN observed at
annotation 13 below.

With the exception of minor topside changes this barge most closely resembles
the probable DECON/RADCON barge observed inboard of a possible "H" Class
SSBN along the quay [REDACTED]

25X1

25X1

13. "N" Class SSN in basin (visible length, excluding scaffolding on bow, is
approx 335').
Detailed measurement of this submarine is precluded because the bow is
scaffolded and the stern end-point is in shadow. Staging can be seen
around nearly all of the submarine hull as well as the sail.

- 25 -

25X1

Approved For Release 2002/10/21 : CIA-RDP78T05161A001500010005-8

TOP SECRET

25X1
25X1
25X1
25X1
25X1



TOP SECRET



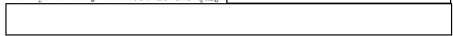
DDI IMAGERY ANALYSIS STAFF



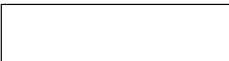
25X1
25X1
25X1
25X1
25X1

A black cavity in the hull is located in the area abaft the sail. The rim of a large upright cylindrical object is visible within the cavity along the submarine's centerline. The outer rim diameter measures approximately [redacted]. The leading edge of the rim of this cylindrical object is located roughly [redacted] from the after edge of the sail on the deckline (the exact after end-point of the sail is indistinct).

No submarine was located in this side of the wet basin [redacted]. It cannot be determined if this submarine equates to the "possible 'N' Class SSN" previously observed at the quay [redacted].



TOP SECRET



25X1
25X1
25X1

25X1

Approved For Release 2002/10/21 : CIA-RDP78T05161A001500010005-8

TOP SECRET

DDI IMAGERY ANALYSIS STAFF


25X1

25X1

25X1

SHIPYARD : NAVAL BASE & SHIPYARD 402
LOCATION : SEVERODVINSK, USSR
GEO COORDS: 64-35N 039-50E

KEY TO ANNOTATIONS ON FIGURE 9

1. Floating crane (approximate platform dimensions )
2. Possible "POLUCHAT-3" Class YPT (LOA approx 70').
A small superstructure well forward contributes to this evaluation.
3. Probable bucket dredge alongside quay (LOA roughly 260').
An exact measurement was not obtainable because of shadows in the area of the bow of this ship. This ship has a raised superstructure amidships and a probable bucket conveyor system at its eastern end.

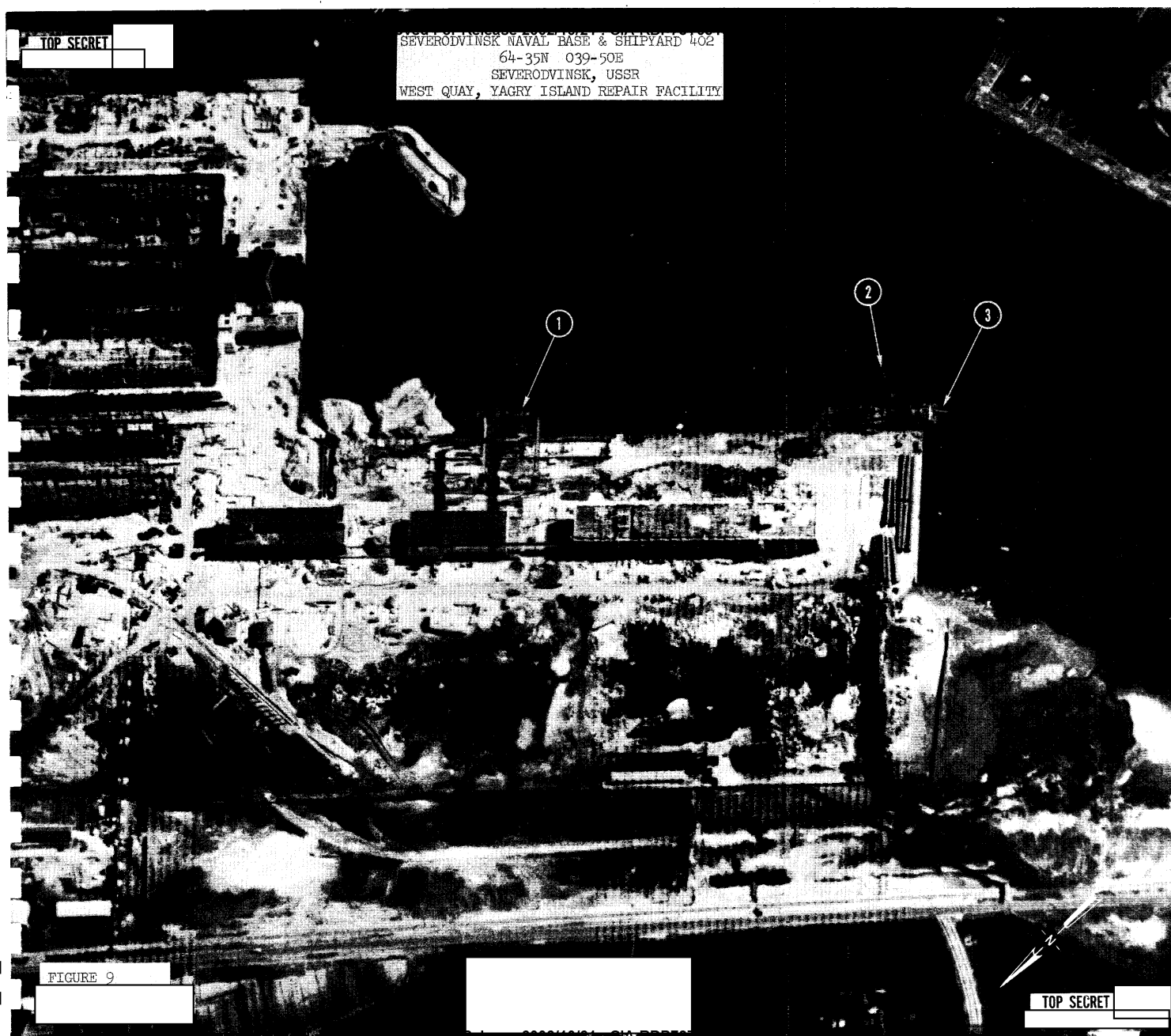
25X1

- 27 -

TOP SECRET

25X1

25X1
25X1



25X1
25X1

FIGURE 9

TOP SECRET

25X1
25X1

25X1

Approved For Release 2002/10/21 : CIA-RDP78T05161A001500010005-8

DDI IMAGERY ANALYSIS STAFF

25X1

25X1

25X1

SHIPYARD : NAVAL BASE AND SHIPYARD 402
 LOCATION : SEVERODVINSK, USSR
 GEO COORDS: 64-35N 039-50E

KEY TO ANNOTATIONS ON FIGURE 10

25X1

25X1

25X1

25X1

1. RIGA Class DE (LOA approx [REDACTED])
[REDACTED]
2. BOLVA Class APL (LOA approx [REDACTED])
[REDACTED]
3. Unidentified bulk cargo barge (LOA approx [REDACTED])
4. "W" Conversion Class TWIN CYLINDER Type SSG (visible waterline length 245'). Identification is based on the two missile tubes positioned immediately abaft the sail, the size and position of the sail, and the approximate length.
[REDACTED]
5. "Z" Conversion Class SSB (visible waterline length approx [REDACTED])
The approximate length of the sail and the two missile tubes visible in the after portion of the sail contribute to this evaluation. This unit apparently is fitted with an icebreaker bow. [REDACTED]
6. Unidentified barge (LOA approx [REDACTED])
This barge has two covered hatches.
7. ZEYA Class YRSN (LOA approx [REDACTED])
A probable ZEYA Class YRSN was last observed by the "H" floating dock. [REDACTED]
8. Unidentified barge (LOA approx [REDACTED])
This barge contains two unidentified rectangular or cylindrical objects.
9. Unidentified barge (LOA approx 140').
Two hatches are visible on deck, each measuring approximately 25' by 15'.
[REDACTED]

25X1

25X1

25X1

25X1

25X1

25X1

25X1

25X1

- 28 -

25X1

TOP SECRET

Approved For Release 2002/10/21 : CIA-RDP78T05161A001500010005-8

25X1

Approved For Release 2002/10/21 : CIA-RDP78T05161A001500010005-8

25X1

Approved For Release 2002/10/21 : CIA-RDP78T05161A001500010005-8

TOP SECRET

25X1

25X1

DDI IMAGERY ANALYSIS STAFF

25X1

SHIPYARD : NAVAL BASE AND SHIPYARD 402
LOCATION : SEVERODVINSK, USSR
GEO COORDS: 64-35N 039-50E

KEY TO NUMBERED ANNOTATIONS ON FIGURE 11
(Annotations are restricted to observable
changes in activity)

25X1

1. The vessels at annotations 1, 2, and 3, Figure 2, have all moved approximately 300 feet eastward along the quay. The forward set of missile tubes on the inboard "J" Class SSG is now in an elevated position, along with both sets of tubes on the outboard "J" Class SSG.
2. Two small probable bulk carriers (apparent LOA of each roughly 180'). Two similar vessels were alongside a bucket dredge positioned just off the eastern end of the East Quay. See annotations 13 and 14, Figure 2 of this report.

25X1

3. The stack-aft cargo ship at annotation 4, Figure 2, has moved westward along the quay and is now moored inboard of the barge at annotation 8, Figure 2.
4. Three unidentified small craft (lengths undetermined). The relative size and configuration of the outboard vessel resembles the unidentified YTM/YTR alongside this quay. See annotation 9, Figure 2.

25X1

5. OKHTPENSKIY Class ATR previously positioned at the quay area, West Basin. This tugboat was not observed at Shipyard 402.

25X1

6. Eight unidentified objects resting on the northernmost launching rails of the southern bay of the construction hall. These objects equate favorably to the floating objects at annotations 2 and 6, Figure 3. Note also that the shallow side of the main launch basin has been drained.

25X1

- 29 -

25X1

Approved For Release 2002/10/21 : CIA-RDP78T05161A001500010005-8

TOP SECRET

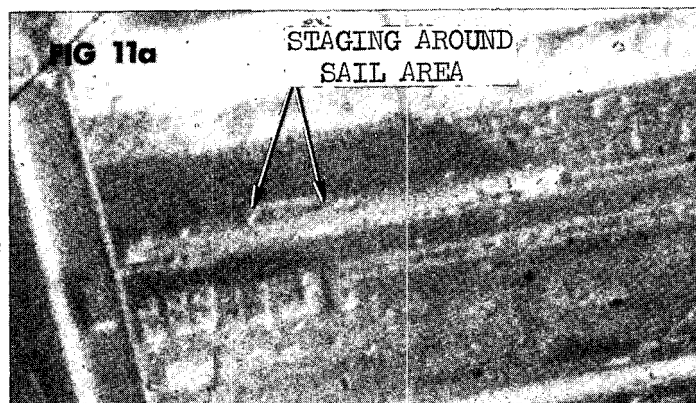
25X1
25X1
25X1

TOP SECRET

DDI IMAGERY ANALYSIS STAFF

7. Possible scaffolding is now visible around the bow of the possible "H" Class SSBN.

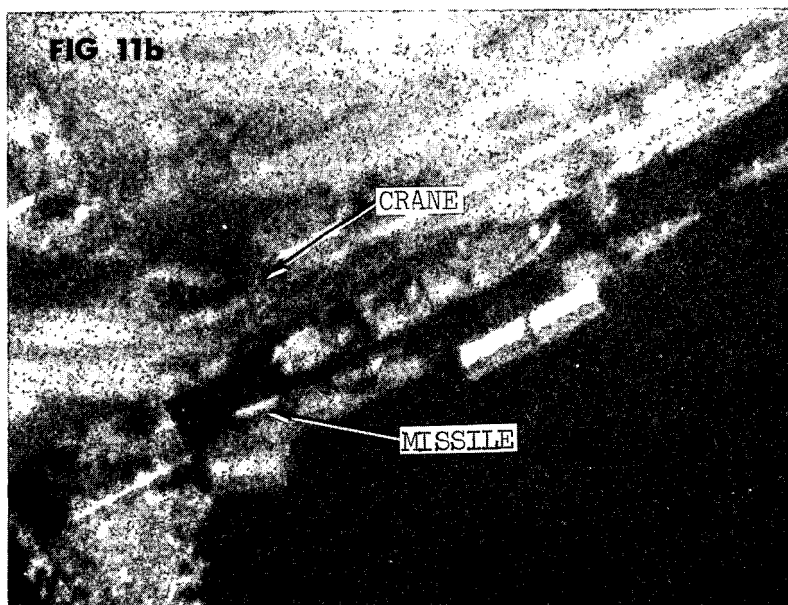
Approximately 70 feet of staging surrounds the area of the sail (although no sail housing is visible) beginning approximately 110 feet from the forwardmost visible edge of the staging over the bow. See inset Figure 11a. The visible length of the submarine plus staging over bow on this Pass is approximately 375 feet. The visible length of the submarine less staging over bow is approximately 370 feet. The leading edge of the bow staging may be masked by the edge of the construction hall on both frames. See annotation 7, Figure 3.



8. Missile loading aboard "E-II" Class SSGN.

A missile is suspended from the boom of the quayside portal crane in line with the elevated starboard (inboard) tube on the forwardmost launcher. See Figure 11b below. The missile measures approximately [redacted] No further details are discernable due to the poor quality of the photography. This marks the earliest observation of missile loading activity at Severodvinsk. Analysis of a subsequent Mission [redacted] [redacted] has revealed a missile loading operation aboard a KYNDA Class DLGM

25X1
25X1
25X1



25X1

TOP SECRET

TOP SECRET

25X1
25X1
25X1

DDI IMAGERY ANALYSIS STAFF

at the West Basin Quay. A previously unreported Naval Missile Storage Facility is located approximately 3000 feet south of the West Basin Quay. [REDACTED]

25X1

The forward launcher of this submarine was elevated [REDACTED] no missile activity was visible on either the quay or the submarine at that time [REDACTED] a floating vertical screen is located forward of the elevated missile launcher rather than in line with it. It is noted that the screen is angled further away from the submarine [REDACTED]

25X1

25X1
25X1

9. Unidentified vessel (LOA approx 175') alongside southern half of east wall of floating dock.

25X1

The shadow cast by the floating dock wall completely obscures the topside detail on this vessel. This vessel was not in this position [REDACTED]

25X1

10. Two unidentified small craft (LOA of each approx 80').

25X1

These are the same two craft observed in the main launch basin by the caisson [REDACTED] this berthing space was occupied by the vessel now positioned at annotation 13 below. [REDACTED]

25X1

11. Floating jib crane.

25X1

This crane was previously positioned in the side launch basin in front of the launching system. See annotation 7, Figure 5.

12. [REDACTED] this unidentified vessel occupied a position along the eastern end of the quay area, West Basin. See annotation 12, Figure 6.

25X1

NOTE: Three vessels observed [REDACTED] alongside the West Basin Quay, annotations 10, 17 (1), and 20, Figure 6, are not observed [REDACTED]

25X1

13. Unidentified probable AG (LOA approx 170') positioned [REDACTED] along the western wall of the Med-moored floating dock at the Fitting-out Quay, Main Yard. See annotation 22, Figure 4.

25X1

25X1

14. YAGT previously moored parallel to the quay.
See annotation 1, Figure 8.

15. Very large floating jib crane previously positioned alongside the possible "H" Class SSBN in the main launch basin.
This marks the first time on [REDACTED] coverage of Shipyard 402 that this crane has been berthed at the Main Quay to the Yagry Island Repair Facility. See annotation 5, Figure 3.

25X1

- 31 -

25X1

TOP SECRET

DDI IMAGERY ANALYSIS STAFF

25X1
25X1
25X1

16. Three additional weather shed sections have been placed over the amidships area of the "H" Class SSBN in the floating dock [REDACTED]. The three additional sheds conceal the area abaft the sail where the deck plating has possibly been removed. See annotation 7, Figure 8.

25X1

17. Bucket dredge (LOA approx 205') observed [REDACTED] in the estuary just off the easternmost end of the East Quay. See annotation 12, Figure 2.

25X1

18. Probable bulk carrier (LOA approx 180').

25X1

TOP SECRET



25X1

Approved For Release 2002/10/21 : CIA-RDP78T05161A001500010005-8

~~TOP SECRET~~

25X1

25X1

DDI IMAGERY ANALYSIS STAFF

SHIPYARD : NAVAL BASE AND SHIPYARD 402
LOCATION : SEVERODVINSK, USSR
GEO COORDS: 64-35N 039-50E

25X1

KEY TO NUMBERED FACILITY ANNOTATIONS ON FIGURE 12

25X1

1. Large thermoelectric power plant (overall dimensions approximately 490' long [] undergoing expansion. Footings and vertical supports for an extension to the plant are in place on the westernmost end of the large building. The addition will extend the complete width of the main building (approximately [] and extend westward approximately 135 feet. Visible footings suggest that the addition will be an expansion of the existing building probably housing additional boilers and generators.

25X1

25X1

25X1

25X1

25X1

25X1

This is the second major expansion of this building [] the westernmost section (approximately [] long) of the existing building was in an early stage of construction. [] the extension appeared to be structurally complete. This new section of the plant was first observed in operation [] when smoke was noted emitting from the large, new, single stack serving the new section. It is believed that this recently completed section of the plant probably houses four boilers. This evaluation is based on the four large flues leading to the stack and the four probable "dust catchers" on the roof.

This expansion is considered to provide a significant increase in capacity since it is believed that the original plant [] contained only 2-4 boilers. With this expansion [] the number of operational boilers is now believed to total 6 to 8.

25X1

25X1

2. Small transverser platform (width approximately 80'). This transverser was observed under construction [] and is now complete and operational. It is utilized to move large pre-fabricated hull sections out of the fabrication building at the north end of the transverser onto rails which extend into the main construction hall.
3. Building under construction. Approximate dimensions cannot be accurately determined due to the early stage of construction; however, a portion of the roof (approximately 180 feet by 40 feet) is in place. The erected section appears to be of light construction.

25X1

- 33 -

TOP SECRET

25X1

TOP SECRET

25X1

25X1

25X1

DDI IMAGERY ANALYSIS STAFF

4. Building in early stages of construction (overall dimensions roughly 620' x 230').
Approximately 50 feet of the roof is in place along the westernmost end. Visible footings indicate that the building will have three bays running in an east-west direction. An unidentified circular object (possibly a tank) having a diameter of approximately 50 feet is positioned in what will be the northernmost bay. Excavations for the foundations of this building were visible [REDACTED]

25X1

5. Unidentified facility.
Overall maximum dimensions within the perimeter fence are approximately 600 feet on the north-south axis and 630 feet on the east-west axis. The buildings within this facility have been structurally complete [REDACTED] [REDACTED] missions [REDACTED] were not of sufficient quality in this area of the yard to permit an accurate assessment of the status of this facility. The following annotations are keyed to Figure 12a - a large scale print of the facility.

25X1

25X1

25X1

- A. Unidentified building (overall dimensions approx 200' by 95'; estimated height roughly 25').
At least 30 small possible vents are visible on the roof. A probable steam line extends from the small building at annotation "C", along the north side of the building, makes a right angle and continues along the east side where it is lost in shadow near the southeast corner of the building. The steam line enters the building in at least two places (at the northeast corner of the building and at the junction with the steam line at annotation "F").
- B. Rectangular excavation (dimensions approx 150' by 80').
It is possible that this excavation will not be a part of the facility.
- C. Small square building (approx [REDACTED] on a side).
This small building is a terminus of the steam line mentioned in annotation "A" above.
- D. Three-bay building (overall dimensions approx 105' by 75').
The building consists of a very high longitudinal center bay approximately 35 feet wide (estimated height roughly 70 feet), and two longitudinal outer bays, each approximately 20 feet wide (estimated height of each roughly 30 feet).
- E. Mobile jib crane along newly constructed quay.
This crane is mounted on rails positioned approximately [REDACTED] apart.

25X1

25X1

25X1

25X1

Approved For Release 2002/10/21 : CIA-RDP78T05161A001500010005-8

TOP SECRET

25X1

25X1

DDI IMAGERY ANALYSIS STAFF

F. Probable steam line serving the buildings at annotations "A", "C", "D", "H", and "J".
There are no visible steam lines entering this facility from an outside source.

G. This quay was in the final stages of construction
It is now complete.

25X1

H. Unidentified building (overall dimensions approx [] estimated height roughly 35').

25X1

Two vents are visible on the roof and the steam line at annotation "F" enters this building on the northern end.

25X1

J. Unidentified building (approx [] estimated height roughly 30').
A very tall slender stack (estimated height above ground roughly 170 feet) enters the building at a point in approximately the center of the roof, and a steam line enters the west side of the building.

K. Unidentified building (overall dimensions approx 90' by 40').
Two vents are positioned along the centerline of the roof (one near each end). Footings for a possible pipe or steam line are visible along the west end and near the east side of the building. These footings do not connect to or come close to any visible existing steam lines.

L. Unidentified building (overall dimensions approx [] estimated height roughly 20').

25X1

Three vents are visible along the centerline of the roof. There are no visible steam lines around this building.

M. Three-cell induced draft cooling tower.

25X1

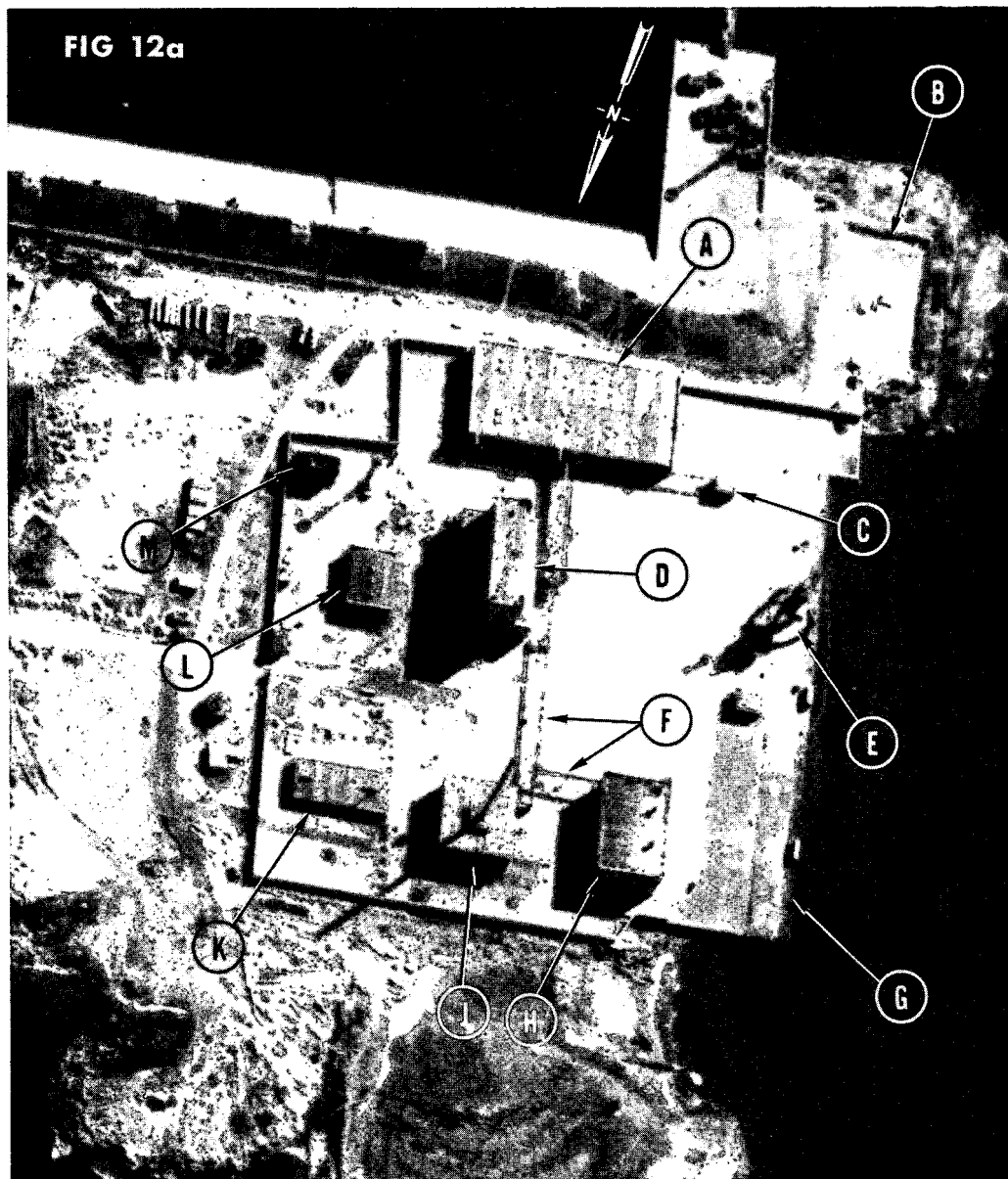
Approved For Release 2002/10/21 : CIA-RDP78T05161A001500010005-8

TOP SECRET

TOP SECRET

25X1
25X1
25X1

DDI IMAGERY ANALYSIS STAFF



6. Two cylindrical buried tanks (diameter of each approx [redacted]) these tanks appeared complete but were not yet covered.

25X1
25X1

- 36 -

TOP SECRET

25X1

25X1
25X1
25X1

Approved For Release 2002/10/21 : CIA-RDP78T05161A001500010005-8

TOP SECRET

DDI IMAGERY ANALYSIS STAFF

7. Excavated area (overall dimensions roughly 575' by 450').
This area has not changed [REDACTED]

25X1

8. Transverser platform under construction (overall dimensions roughly 510' - on the side parallel to the approximately 430 foot long winch house - by 400').

The transverser rails are not yet in place in two small areas; i.e., an 80 foot square section in the southeast corner and an 80 foot square section in the southwest corner. The winch house paralleling the northern edge of the transverser platform measures approximately 435 feet in length and appears to be structurally complete.

9. New repair basin (overall inside dimensions approx 680' by 405'; width across openings at both ends of basin approx 80').

This basin became operational [REDACTED]

25X1

25X1

[REDACTED] at which time three vessels were observed in the basin. When the repair way at annotation 11 below is completed this basin will serve the dual purpose of providing both a repair basin and a ship-lift/launch capability to and from the transverser.

10. Unidentified facility under construction.

This facility consists of three main buildings connected by a pipeline. A small circular object is attached to the pipeline and positioned between the two smaller buildings (see Figure 9 above for a large scale photo of this facility). The following annotations are keyed to inset Figure 12b.

- A. Area along new quay not yet dredged.
- B. Gantry crane engaged in quay construction.
- C. Floating crane alongside quay under construction.
- D. Gantry crane engaged in quay construction. This crane appears identical to the gantry crane at annotation "B" above.
- E. Portal jib crane.

- F. Two-bay building (overall dimensions approx [REDACTED])

25X1

Five vents are visible along the center of the roof on the western half of the southern bay. The estimated height of this higher of the two bays is roughly 65 feet with the width approximately [REDACTED]. The northern bay, which is substantially lower (estimated height roughly 45 feet), has two "hooded" stacks positioned near the easternmost end of the building. The estimated height above ground level of each of these stacks is roughly 80 feet.

25X1

- 37 -

25X1

Approved For Release 2002/10/21 : CIA-RDP78T05161A001500010005-8

TOP SECRET

25X1
25X1
25X1

TOP SECRET

DDI IMAGERY ANALYSIS STAFF

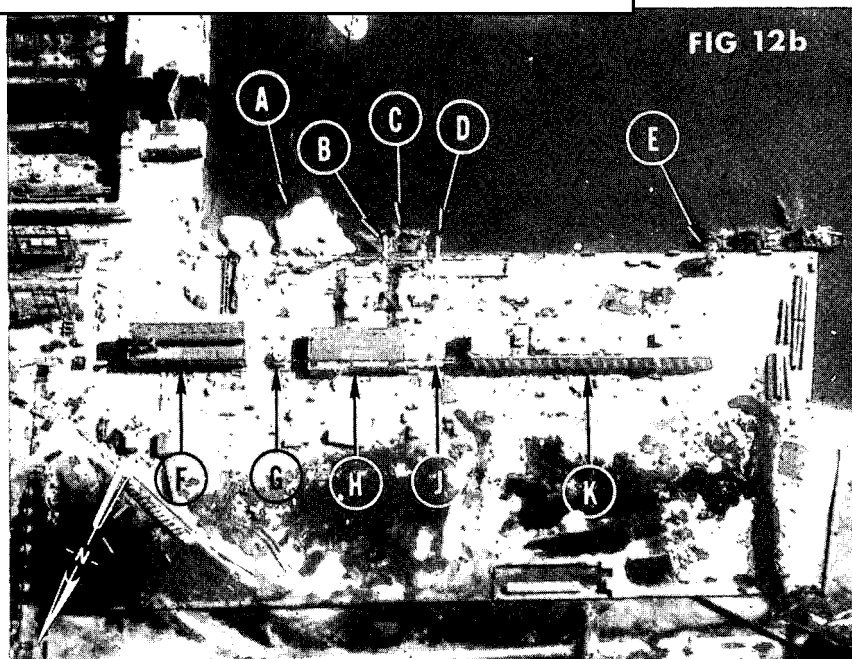
- G. Large round structure (outer base diameter approx 35'; estimated height roughly 15'). From above, this imagery resembles two concentric cylinders - one on top of the other. The higher, smaller cylinder - or cover - measures approximately 25 feet in diameter and is indented across its topmost surface by a pair of right angled bisecting grooves.
- H. Building (overall dimensions - less north bay - approx 175' by 65'; estimated height roughly 35'). This building has a lower narrow bay (approximately [redacted] running its complete length on the southernmost side. The steam line at annotation "J" extends across the roof of the low bay of the building. Two vents are positioned near the easternmost end of the higher bay.
- J. Steam line running between the three main buildings and the large round structure (annotation "G"). No steam lines are visible entering the facility at this time.
- K. Four-story laboratory-type building (overall dimensions approx [redacted] estimated height roughly 50'). Two possible elevator shaft housings are visible on the roof approximately 100 feet from each end. The structures at annotations F, G, H, and K, Figure 12a, appear identical to those of a facility at Petrovka Shipyard, Petrovka, USSR (43-07N 132-21E). However, the building at Petrovka corresponding to the building at annotation "F" above has been constructed at right angles to the rest of the buildings. [redacted]

25X1

25X1

25X1

25X1



25X1

TOP SECRET

25X1

Approved For Release 2002/10/21 : CIA-RDP78T05161A001500010005-8

TOP SECRET

25X1

25X1

DDI IMAGERY ANALYSIS STAFF

11. Building/repair way(s) under construction (rough dimensions between visible vertical supports - 610' by 105').

This facility was under construction [REDACTED] Heavily constructed upright supports are visible along both sides of the building/repair way(s), possibly to carry overhead gantry cranes and a roof. A traveling jib crane is visible positioned on probable rails between the upright supports. This crane may or may not be a permanent part of the facility.

25X1

12. Railroad spur under construction.

Construction on this spur has progressed approximately 200 feet [REDACTED] [REDACTED] The 200 foot progress [REDACTED] extends through marshland and is elevated on pilings. Poor soil conditions may partially explain the slow pace of railbed construction in this area.

25X1

25X1

25X1

13. Construction continues on the probable processing building (approximately [REDACTED] estimated height roughly 100').

The roof of this building is not yet in place and additional stories may yet be added.

25X1

14. Four tanks (diameter of each approx 75') - three of which appear complete. The northeasternmost tank may be incomplete as it has a small, probably temporary, shack-like structure and a T-shaped, slightly raised object on the roof and a rough inconsistent tone unlike the three other tanks which have a smooth light-toned appearance. The wall surrounding these four tanks is still incomplete as the side closest the estuary entrance is open in the middle between the tanks.

25X1

Approved For Release 2002/10/21 : CIA-RDP78T05161A001500010005-8

TOP SECRET



TOP SECRET

25X1

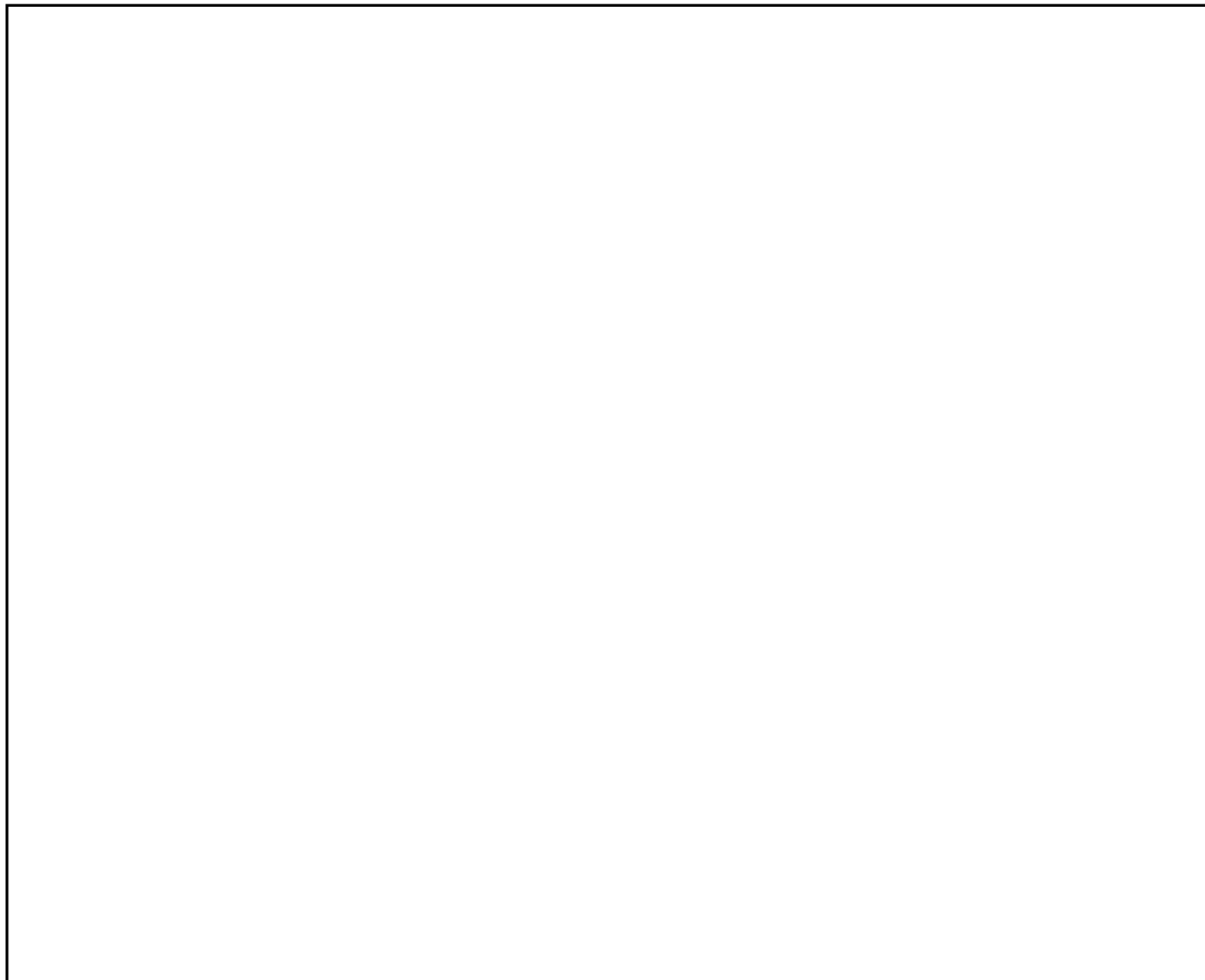
25X1

25X1

DDI IMAGERY ANALYSIS STAFF

REFERENCE

25X1



DOCUMENTS

1. CIA/PTR-67315. Naval Base and Shipyard 402, Severodvinsk, USSR

TOP SECRET

25X1

25X1

- 40 -

TOP SECRET

25X1

25X1
25X1
25X1

DDI IMAGERY ANALYSIS STAFF

2. CIA/PIR-67041, Severodvinsk Naval Base and Shipyard 402, Severodvinsk, USSR [REDACTED] TOP SECRET [REDACTED]
3. CIA/PIR-67165, Severodvinsk Naval Base and Shipyard 402, Severodvinsk, USSR [REDACTED] TOP SECRET [REDACTED]
4. CIA/PIR-67166, Severodvinsk Naval Base and Shipyard 402, Severodvinsk, USSR [REDACTED] TOP SECRET [REDACTED]
5. CIA/PTR-67167, Severodvinsk Naval Base and Shipyard 402, Severodvinsk, USSR [REDACTED] TOP SECRET [REDACTED]
6. CIA/PIR-67311, Naval Base and Shipyard 402, Severodvinsk, USSR, [REDACTED] TOP SECRET [REDACTED]
7. CIA/PIR-67314, Naval Base and Shipyard 402, Severodvinsk, USSR, [REDACTED] TOP SECRET [REDACTED]
- [REDACTED]
9. CIA/PIR-77012, Admiralty Shipyard 194, Leningrad, USSR [REDACTED] TOP SECRET [REDACTED]
10. CIA/PIR-77030, Gorkiy Shipyard 112, Gorkiy, USSR [REDACTED] TOP SECRET [REDACTED]
11. CIA/PIR-77036, Gorkiy Shipyard 112, Gorkiy, USSR [REDACTED] TOP SECRET [REDACTED]
12. CIA/PIR-77073, Petrovka Shipyard, Petrovka, USSR [REDACTED] TOP SECRET [REDACTED]
13. DIA. PC-230/2-1, Naval Ships of the USSR, January 1964 (SECRET)
14. CIA/IAD Msg 101551Z, January 1967 (TOP SECRET [REDACTED])

REQUIREMENT NO.

C-RR6-83,787

CIA/IAS PROJECT

30097-7

TOP SECRET

TOP SECRET